LISTING OF CLAIMS

1. (Previously Presented) A method for generating data for transmission from a subscriber unit to a base station, comprising:

modulating each of a plurality of channels of data with an associated code to produce a plurality of streams of modulated symbols;

combining the plurality of streams of modulated symbols into a combined stream; and

complex multiplying said combined stream with a complex pseudonoise code to reduce a peak-to-average ratio of the transmission,

wherein the modulating each of the plurality of channels of data with the associated code comprises:

modulating control data with a first code to produce a first stream of modulated symbols; and

modulating a user first channel encoded data with a second code to produce a second stream of modulated symbols.

2. (Canceled)

3. (Previously Presented) The method as claimed in claim 1, wherein said combining the plurality of streams of modulated symbols comprises:

providing said first stream of modulated symbols separately from said second stream of modulated symbols for said complex multiplying and merging said first stream of modulated symbols and said second stream of modulated symbols by said complex multiplying.

4. · (Currently Amended) The method as claimed in claim 1, wherein said modulating each of the plurality of channels of data further comprises:

Attorney Docket No. PA298B2A3D1
Customer No. 23696

modulating a user second channel encoded data with a third code to produce a third stream of modulated symbols.

5.   (Previously Presented) The method as claimed in claim 1, wherein said combining the plurality of streams of modulated symbols comprises:

adding the first stream of modulated symbols to the second stream of modulated symbols to provide a first added stream of modulated symbols; and

providing said first added stream of modulated symbols separately from a third stream of modulated symbols for said complex multiplying and merging said first added stream of modulated symbols and said third stream of modulated symbols by said complex multiplying.

6.   (Currently Amended) The method as claimed in claim 4 [[1]], further comprising:

providing a fourth stream of modulated symbols comprising [[a]] pilot channel data of modulated symbols.

7.   (Currently Amended) The method as claimed in claim 6, wherein said combining the plurality of streams of modulated symbols comprises:

adding the fourth stream of modulated symbols to one of the first stream and the second stream of modulated symbols to provide a first added stream of modulated symbols; and

providing said first added stream of modulated symbols separately from the remaining of the first stream and the second stream of modulated symbols for said complex multiplying and merging said first added stream of modulated symbols and said second stream of modulated symbols by said complex multiplying.

8.   (Canceled)

9.   (Currently Amended) The method as claimed in claim 6 [[8]], wherein said

- 3 -

PATENT

combining the plurality of streams of modulated symbols comprises:

adding the first stream of modulated symbols to the second stream of modulated symbols to provide a first added stream ~~of modulated symbols~~; [[and]]

adding the fourth stream ~~of modulated symbols~~ to the third stream of modulated symbols to provide a second added stream ~~of modulated symbols~~; and [[:]]

providing said first added stream ~~of modulated symbols~~ separately from the second added stream ~~of modulated symbols~~ for said complex multiplying and merging said first added stream ~~of modulated symbols~~ and said second added stream ~~of modulated symbols~~ by said complex multiplying.

10. (Previously Presented) The method as claimed in claim 1, wherein the complex pseudonoise code comprises an in-phase pseudonoise code component and a quadrature-phase pseudonoise code component.

11. (Previously Presented) The method as claimed in claim 10, wherein the in-phase pseudonoise code component and the quadrature-phase pseudonoise code component arc multiplied by a long code.

12. (Currently Amended) The method as claimed in claim <u>10</u> [[1]], wherein said complex multiplying comprises:

using a first of the combined <u>stream</u> ~~streams~~ and [[an]] <u>the</u> in-phase pseudonoise code component as real parts; and

using a second of the combined <u>stream</u> ~~streams~~ and [[a]] <u>the</u> quadrature-phase pseudonoise code component as imaginary parts.

13. (Currently Amended) The method as claimed in claim 12, wherein said complex multiplying comprises:

multiplying the first of the combined <u>stream</u> ~~streams~~ by the in-phase pseudonoise

- 4 -

Attorney Docket No. PA298B2A3D1
Customer No. 23696

code component to produce a first intermediate signal;

multiplying the second of the combined stream ~~streams~~ by the in-phase pseudonoise code component to produce a second intermediate signal;

multiplying the first of the combined stream ~~streams~~ by the quadrature-phase pseudonoise code component to produce a third intermediate signal;

multiplying the second of the combined stream ~~streams~~ by the quadrature-phase pseudonoise code component to produce a fourth intermediate signal:

subtracting the fourth ~~interediate~~ intermediate signal from the first intermediate signal to produce an in-phase product signal; and

adding the second ~~intermdiate~~ intermediate signal to the third intermediate signal to produce a quadrature-phase product signal.

14.. (Previously Presented) The method as claimed in claim 1, wherein the associated code is a Walsh code.

15. (Currently Amended) The method as claimed in claim 4, wherein a length of the second code differs from ~~is greater than~~ a length of the third code.

16. (Previously Presented) The method as claimed in claim 1, further comprising:

adjusting gains of the plurality of streams of modulated symbols.

17. (Currently Amended) The method as claimed in claim 16, wherein said adjusting gains of the plurality of streams of modulated symbols comprises:

adjusting gain of the first stream of modulated symbols: and

adjusting ~~gains of each~~ gain of the ~~remaining streams~~ second stream of modulated symbols to a value ~~values~~ determined relative to the gain of the first stream of modulated symbols.

18.　(Previously Presented) An apparatus for generating data for transmission from a subscriber unit to a base station, the apparatus comprising:

a plurality of modulators configured to modulate each of a plurality of channels of data with an associated code to produce a plurality of streams of modulated symbols;

a combiner, communicatively coupled to said plurality of modulators, configured to combine the plurality of streams of modulated symbols into a combined stream; and

a complex multiplier, communicatively coupled to said combiner, configured to complex multiply said combined stream with a complex pseudonoise code to reduce a peak-to-average ratio of the transmission,

wherein said plurality of modulators comprises:

a first modulator configured to modulate control data with a first code to produce a first stream of modulated symbols; and

a second modulator configured to modulate a user first channel encoded data with a second code to produce a second stream of modulated symbols.

19　(Canceled)

20.　(Currently Amended) The apparatus as claimed in claim 18, wherein said combiner comprises:

a first adder configured to <u>receive at least one</u> ~~provide the first~~ stream of modulated symbols <u>and provide</u> [[as]] a first combined stream;~~and~~

~~a second adder configured to provide the second stream of modulated symbols as a second combined stream.~~

21.　(Previously Presented) The apparatus as claimed in claim 18, wherein said plurality of modulators further comprises:

- 6 -

a third modulator configured to modulate a user second channel encoded data with a third code to produce a third stream of modulated symbols.

22.   (Currently Amended) The apparatus as claimed in claim 18, wherein said combiner comprises:

a first adder configured to add the first stream of modulated symbols to the second stream of modulated symbols to provide a first combined stream; and

a second adder configured to provide said third stream of modulated symbols as a second combined stream.

23.   (Currently Amended) The apparatus as claimed in claims 21 [[18]], wherein said plurality of modulators further comprising comprises:

a fourth modulator configured to provide a fourth stream of modulated symbols comprising a pilot channel of pilot channel data modulated symbols.

24.   (Currently Amended) The apparatus as claimed in claim 18 [[23]], wherein said combiner comprises:

a first adder configured to add the second fourth stream of modulated symbols to the first stream of modulated symbols to provide a first combined stream; and

a second adder configured to add the fourth stream of modulated symbols to the second stream of modulated symbols to provide a second combined stream.

25.   (Canceled)

26.   (Currently Amended) The apparatus as claimed in claim 23 [[25]], wherein said combiner comprises:

a first adder configured to add the first stream of modulated data to the second stream of modulated to provide a first combined stream; and

- 7 -

a second adder configured to add the fourth stream of modulated data to the third stream of modulated to provide a second combined stream.

27.   (Previously Presented) The apparatus as claimed in claim 18, wherein the complex pseudonoise code comprises an in-phase pseudonoise code component and a quadrature-phase pseudonoise code component.

28.   (Previously Presented) The apparatus as claimed in claim 27, wherein the in-phase pseudo noise code component and the quadrature-phase pseudo noise code component are multiplied by a long code.

29.   (Currently Amended) The apparatus as claimed in claim 27 [[18]], wherein said complex multiplier is configured to:

use a first of the combined stream and [[an]] the in-phase pseudonoise code component as real parts; and

use a second of the combined stream and [[a]] the quadrature-phase pseudonoise code component as imaginary parts.

30.   (Previously Presented) The apparatus as claimed in claim 29, wherein said complex multiplier comprises:

a first multiplier configured to multiply the first combined stream by the in-phase pseudonoise code component to produce a first intermediate signal;

a second multiplier configured to multiply the second combined stream by the in-phase pseudonoise code component to produce a second intermediate signal;

a third multiplier configured to multiply the first combined stream by the quadrature-phase pseudonoise code component to produce a third intermediate signal;

a fourth multiplier configured to multiply the second combined stream by the quadrature-phase pseudonoise code component to produce a fourth intermediate signal;

a first adder configured to subtract the fourth intermediate signal from the first intermediate signal to produce an in-phase product signal; and

a second adder configured to add the second intermediate signal to the third intermediate signal to produce a quadrature-phase product signal.

31.   (Previously Presented) The apparatus as claimed in claim 18, wherein the associated code comprises a Walsh code.

32.   (Currently Amended) The apparatus as claimed in claim 21, wherein a length of the second code differs from ~~is greater than~~ a length of the third code.

33.   (Previously Presented) The apparatus as claimed in claim 18, further comprising:

a plurality of gain adjusters configured to adjust gains of the plurality of streams of modulated symbols.

34.   (Currently Amended) The apparatus as claimed in claim 33, wherein said plurality of gain adjusters comprises:

a gain adjuster configured to adjust a first gain of the first stream of modulated symbols; and

a second gain adjuster configured to adjust gain of the second stream of modulated symbols to a value ~~plurality of adjusters configured to adjust gains of each of the remaining streams of modulated symbols to values~~ determined relative to the gain of the first stream of modulated symbols.

35.   (Currently Amended) An apparatus for generating data for transmission from a subscriber unit to a base station, comprising:

means for modulating each of a plurality of channels of data with an associated code to produce a plurality of streams of modulated symbols;

means for combining the plurality of streams of modulated symbols into a

combined stream; and

means for complex multiplying said combined stream with a complex pseudonoise code to reduce a peak-to-average ratio of the transmission,

wherein the means for modulating each of the plurality of ~~channel encoded~~ channels of data with the associated code comprises:

means for modulating control data with a first code to produce a first stream of modulated symbols; and

means for modulating a user first channel encoded data with a second code to produce a second stream of modulated symbols.